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TECH CENTER 1600/2900

RAW SEQUENCE LISTING

DATE: 01/09/2002

PATENT APPLICATION: US/09/696,664A

TIME: 14:47:55

Input Set : D:\pa_00316.txt

Output Set: N:\CRF3\01082002\I696664A.raw

ENTERED

1 <110> APPLICANT: Abad, Mark S.
 2 Andersen, Scott E.
 3 Dubois, Patrice
 4 Mahadeo, Debbie A.
 5 Masucci, James D.
 7 <120> TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
 8 Plants
 10 <130> FILE REFERENCE: 38-21(51721)B
 12 <140> CURRENT APPLICATION NUMBER: US 09/696,664A
 13 <141> CURRENT FILING DATE: 2000-10-25
 15 <150> PRIOR APPLICATION NUMBER: US 60/161,619
 17 <151> PRIOR FILING DATE: 1999-10-26
 19 <160> NUMBER OF SEQ ID NOS: 17472
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 416
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Zea mays
 26 <220> FEATURE:
 27 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A11
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 33 ttgatcaaat caatagaagg aaggatccct tacctgattt gaatttcac ctcctttaa 120
 35 taggatatgc tctaagtctt ccatacttt cctataatga ctgcaacgat tttctccatt 180
 37 ttgcgaattc ctattttatt tgaagtatat tactatcata tacattatct aaatcgatcc 240
 39 actttaaata aatagaaaa aatcgaaaga aaaaaaaaaa gaaagagtaa ataataaac 300
 41 aggatattct gtttcataat tctgaaatag agttcttttt tttagtatta ctcctcatta 360
 43 ggatgtatat attaatcatc ctattttta atataatta catcctattt taatta 416
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 47 <211> LENGTH: 157
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 49 <213> ORGANISM: Zea mays
 51 <220> FEATURE:
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 58 agagtatggg agaaacctta atctaaagaa aaaaaaaaaa aaaaaaaaaa 120
 60 aaaaaaaaaa aaaaaaaaaa ataaaaataa attataa 157
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 66 <213> ORGANISM: Zea mays
 68 <220> FEATURE:
 69 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A2
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 77 accccggagt acgaaaccaa ggatactgat atcttggcag cattccgagt aactcctcag 180

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79 ctcggggttc cgctgaaga agcaggagct gcagtagctg cggaatcttc tactggtaca 240
81 tggacaactg tttggactga tggacttacc agtcttgatc gttacaaagg acgatgctat 300
83 cacatcgagc ccgttcctgg ggacccagat caatatatct gttatgtagc ttatocatta 360
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89 <211> LENGTH: 256
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91 <213> ORGANISM: Zea mays
93 <220> FEATURE:
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100 tcgtaggtgg gcttggtacg ttgatgatca cagacaggac acgatcggat cggggtagat 120
102 aaagagggat aaaagtggag gacggctgta cagacacgta cggagatgcc actgctgtga 180
104 tgagacacgc tatttgcagg gcgaacctg ttactatcat gtgcttcttg tcaggtacca 240
106 tatgtactc gatggt
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111 <212> TYPE: DNA
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114 <220> FEATURE:
115 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-A4
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123 ggcaagggcc cgctcgagaa cctcgccgac cacctcgccg acccctcaa caacaacgca 180
125 tgggcctatg ccaccaactt tgtgcccggc aagtgagggg gtggaggcgc caccgcccac 240
127 cggccaccgc tgcggatata taggtgttcg gatgcacgtg agcgcgcact ggttccagtt 300
129 tgtaccatga tgtaaattac ttaccgtacc agggttcaat cggcaaggaa gaattgttgt 360
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135 <211> LENGTH: 361
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137 <213> ORGANISM: Zea mays
139 <220> FEATURE:
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148 gactacaaag aggacgttg tgtgaagctt gagaggcctg tcgagggatga tgaggctatg 180
150 caggaggttg ctgctgccga gtatgttatt tgctacttct ttatctagac gaatctggac 240
152 aggaggtccc ttatgacgcg aacttcataa aattgtctgg cgacatgttt tcttctgtcc 300
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156 t
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160 <211> LENGTH: 317
161 <212> TYPE: DNA
162 <213> ORGANISM: Zea mays
164 <220> FEATURE:

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165 <221> NAME/KEY: unsure
 166 <222> LOCATION: (1)..(317)
 167 <223> OTHER INFORMATION: unsure at all n locations
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 178 gcgtccctcc tggctgccga cgcgcggcgc tgccacggct tcctcgtcgc catcccgtcc 180
 180 gatcccaacc ccgaccccag cagaggcgac ggcgcggtca accgccacct cggcgtctcc 240
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 201 cgggtggtgc gcttcaagtc gaaccatctc ggcaagttct ggaggcggag cccaactgg 180
 203 atctgggccc acaccgacga caccagcacc aagaactccg acaccctgtt cgaggctatc 240
 205 aagatcgacg aggacggtgt gtacgcgctc cggaacctcg gcaacaacca cttctgccac 300
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 215 <220> FEATURE:
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 224 agctgcttga tagagttgat agtttgggtc aggagccaga tctgaaggac atacgcatca 180
 226 cctttgagga gtttaaggca tttgctgatt tgcgacgaag attggagcca ctgtcgatgg 240
 228 ctatctttgc ttacggtaaa ttgaatgggt tattgacgaa agaggatcta aaacgtgcag 300
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 235 <210> SEQ ID NO: 10
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 240 <220> FEATURE:
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 247 gacctcggcg gcgtcggcga gcagaccac acgaccggaa cgggcttcat caagatggac 120
 249 aaagctaaag gcgccccctt caaactgtct gaagatccca atgcagagga gcgacatgct 180

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251 tcttgcaggg gaaacctgc taccaacgag tggatcccgt cagctgacac ggtgtaccg 240
253 gcgtcagaca agccaagcag aagcgacagc tgagggactg tatactcca gccatgagaa 300
255 ttcagacgag tgctttccac cattagaata agaaaccaca ctggttgctc accatatctt 360
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265 <220> FEATURE:
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272 tcattatgga agacagatgt ggaggccgtt ggccggtgcc tgctcgtgat gcgctttccc 120
274 tggatgtcat ttgattaatt ataagcaagt acgtgaagaa acgagggcca gacgactgtc 180
276 gtccagcgat tggttatttg tgaacttgct gtttgccttc ttatttcaac ttccaataa 240
278 gcccttctgt gaagtgtcat ccgcttcaaa gtctgtcgac tgttacgtat acaaacttat 300
280 atatcaaatt aagacggcgc ccgtaccgtg tgtatt 336
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286 <213> ORGANISM: Zea mays
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297 ccaaggagaa catggagtct ctgatatcga tcggccagga gctgctcaac aagccagtgg 180
299 cgagagtga catcgacaca gggctgtacg agtccctcga gggtgagggc acaaatgcac 240
301 agtcgctagc tgacttcgcc aagcagctct ctgacgagcg caagctacgc aagagcaatc 300
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305 gttcttattt tta 373
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313 <220> FEATURE:
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322 tagctaaagg cgcccgtttt aaact 145
325 <210> SEQ ID NO: 14
326 <211> LENGTH: 409
327 <212> TYPE: DNA
328 <213> ORGANISM: Zea mays
330 <220> FEATURE:
331 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-B3
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341 ccatctcggc aacgcggttc ctgattctga tatgcttctt gtcgggaacc atatgtact 240
343 tcatggtgcg cctccatcct ggcttcgagc actacatctt cttcgtcttg aacctgtacg 300
345 ccagcggttac ggtggcgag agcttgatga tggcgattgc cagtgtcatt cccaatttcc 360
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355 <220> FEATURE:
356 <223> OTHER INFORMATION: Clone ID: LIB3179-001-P1-K1-B4
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364 cgcgtggagg cgaggcacgt cgactacagc cagggtccca gcgtgcccaa gccgctcatg 180
366 gtggtcgcgc ccaccgacgc cggcgtgtac cccgtggccg tcttcttgca cggctgcaac 240
368 acggtcaaca gctggtatga gagcctcctg tcgcacgtcg cgtcccacgg gttcatcgcc 300
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378 <213> ORGANISM: Zea mays
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389 cgcccagctt ctgataatcc gaaatggagc agcatgtatg tatattacca aaaacaagat 180
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410 agctgcttga tagagttgat agtttggtca aggagccaga tctgaaggac atacgcatca 180
412 cctttgagga gtttaaggca tttgctgatt tgcgacgaag attggagcca ctgtcgatgg 240
414 ctatctttgc ttacggtaaa ttgaatgggt tattgacgaa agaggatcta aaacgtgcag 300
416 tgcaacatgt ttgcgggggt tacttaacag atagagttgt agacatcatt ttcattgtgt 360
418 cgacaca 367
421 <210> SEQ ID NO: 18
422 <211> LENGTH: 127
423 <212> TYPE: DNA

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Use of n and/or Xaa has been detected in the Sequence Listing.
 Review the Sequence Listing to insure a corresponding
 explanation is presented in the <220> to <223> fields of
 each sequence using n or Xaa.

VERIFICATION SUMMARY

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L:658 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:660 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:662 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:672 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28
L:757 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32
L:1072 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:1130 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49
L:1173 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51
L:1284 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55
L:1393 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:1423 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60
L:1451 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61
L:1574 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66
L:1602 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:67
L:1622 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:68
L:1763 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74
L:1881 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79
L:1883 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:79
L:1955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82
L:1959 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82
L:2004 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84
L:2095 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88
L:2097 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88
L:2163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91
L:2165 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91
L:2167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91
L:2169 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91
L:2195 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92
L:2197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92
L:2229 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93
L:2231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93
L:2257 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94
L:2259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94
L:2287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95
L:2289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95
L:2338 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:97
L:2340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:97
L:2368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:98
L:2394 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99
L:2416 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100
L:2446 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101
L:2450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:101
L:2579 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:107
L:2609 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:108
L:2641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:109
L:2688 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:111
L:2779 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:115

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L:2841 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:118

L:2995 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:125